



SEQUENCE LISTING

<110> Merja PENTTILA et al.

<120> PROCESS FOR PARTITIONING OF PROTEINS

<130> 0933-0170P

<140> US 09/936,823

<141> 2001-10-24

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<151> 2000-03-24

<150> FI 19991782

<151> 1999-08-20

<150> FI 19990667

<151> 1999-03-25

<160> 46

<170> PatentIn Ver. 2.2

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<221> intron

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<223> Coding sequence of hfb1

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 <223> Description of Artificial Sequence: PCR 3' primer

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 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR 5' primer

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 <212> DNA
 <213> Trichoderma reesei

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 <222> (1)..(2211)
 <223> cbh1 promoter sequence

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<211> 1588

<212> DNA

<213> *Trichoderma reesei*

<220>

<221> misc_feature

<223> *T. reesei* eg11 cDNA

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<213> Trichoderma reesei

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<222> (1)..(745)
<223> T. reesei cbh1 terminator

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<210> 8
<211> 10
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: annealed primer

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<400> 8
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<210> 9
<211> 16
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: annealed primer

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<400> 9
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<210> 10
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 <213> Trichoderma reesei

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 <223> T. reesei gpd1 promotor

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<210> 11
 <211> 1129
 <212> DNA
 <213> Trichoderma reesei

<220>
 <221> terminator
 <222> (1)..(1129)
 <223> T. reesei gpd1 terminator

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<211> 5733

<212> DNA

<213> *Aspergillus nidulans*

<220>

<221> misc_feature

<223> (1-5733) Sequence of plasmid pAN52-1

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<221> promoter

<222> (1)..(2129)

<223> *A. nidulans* gpdA promoter

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<221> gene

<222> (2130)..(2304)

<223> *A. nidulans* gpdA gene

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<221> terminator

<222> (2305)..(3071)

<223> *A. nidulans* trpC terminator

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<221> misc_feature

<222> (3072)..(5726)

<223> pUC18 from SalI to EcoRI

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acttctacaa	tggctgccat	cattattatc	cgatgtgacg	ctgcagcttc	tcaatgatata	4140
tcgaatacgc	tttgaggaga	tacagcctaa	tatccgacaa	actgttttac	agattttacga	4200
tcgtacttgt	tacccatcat	tgaattttga	acatccgaac	ctgggagttt	tccttgaaac	4260
agatagtata	tttgaacctg	tataataata	tatagtctag	cgcttttacg	aagacaatgt	4320
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atccccgggt	cattttctgc	gtttccatct	tgcacttcaa	tagcatatct	ttgttaacga	4440
agcatctgtg	cttcatthttg	tagaacaata	atgcaacgcg	agagcgctaa	tttttcaaac	4500
aaagaatctg	agctgcattt	ttacagaaca	gaaatgcaac	gcgaaagcgc	tattttacca	4560
acgaagaatc	tgtgcttcat	ttttgtaaaa	caaaaatgca	acgcgacgag	agcgctaatt	4620
tttcaaacaa	agaatctgag	ctgcattttt	acagaacaga	aatgcaacgc	gagagcgcta	4680
ttttaccaac	aaagaatcta	tacttctttt	ttgttctaca	aaaatgcatc	ccgagagcgc	4740
tatttttcta	acaaagcatc	ttagattact	ttttttctcc	tttgtgcgct	ctataatgca	4800
gtctcttgat	aactttttgc	actgtaggtc	cgtaaggtt	agaagaaggc	tactttggtg	4860
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gaagctgcgg	gtgcattttt	tcaagataaa	ggcatccccg	attatattct	ataccgatgt	4980
ggattgcgca	tactttgtga	acagaaagtg	atagcggtga	tgattcttca	ttggtcagaa	5040
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ttcgtattgt	tttcgattca	ctctatgaat	agttcttact	acaatttttt	tgtctaaaga	5160
gtaatactag	agataaacat	aaaaaatgta	gaggtcgagt	ttagatgcaa	gttcaaggag	5220
cgaaagggtg	atgggtaggt	tatataggga	tatagcacag	agatatatag	caaagagata	5280
cttttgagca	atgtttgtgg	aagcgggtatt	cgcaatggga	agctccaccc	cggttgataa	5340
tcagaaaagc	cccaaaaaca	ggaagattgt	ataagcaaat	atttaaattg	taaacgttaa	5400
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gtcgagggtg	cgtaaagcag	taaatcgga	gggtaaacgg	atgcccccat	ttagagcttg	5700
acggggaaag	ccggcgaacg	tggcgagaaa	ggaagggaag	aaagcgaaag	gagcgggggc	5760
tagggcggtg	ggaagtgtag	gggtcacgct	gggcgtaacc	accacaccgc	ccgcgcttaa	5820
tggggcgcta	cagggcgcg	ggggatgac	cactagt			5857

<210> 20

<211> 403

<212> DNA

<213> Trichoderma reesei

<220>

<221> misc_feature

<223> (1-403) T. reesei hfb2 coding sequence

<220>

<221> intron

<222> (131)..(200)

<220>

<221> intron

<222> (287)..(358)

<400> 20

atgcagttct togccgtcgc cctcttcgcc accagcgccc tggctgctgt ctgccctacc 60

ggcctcttct ccaaccctct gtgctgtgcc accaacgtcc tcgacctcat tggcggttgac 120

tgcaagaccc gtatgttgaa ttccaatctc tgggcatcct gacattggac gatacagttg 180
 acttacacga tgctttacag ctaccatcgc cgtcgacact ggcgccatct tccaggctca 240
 ctgtgccagc aagggctcca agcctctttg ctgcgttgct cccgtggtaa gtagtgctcg 300
 caatggcaaa gaagtaaaaa gacatttggg cctgggatcg ctaactcttg atatcaaggc 360
 cgaccaggct ctctgtgccc agaaggccat cggcaccttc taa 403

<210> 21
 <211> 59
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR 5' primer

<400> 21
 cggaggagct cgacgacttc gagcagcccg agctgcacgc aggctgtctg ccctaccgg 59

<210> 22
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR 3' primer

<400> 22
 tcattggatc cttagaaggt gccgatggc 29

<210> 23
 <211> 679
 <212> DNA
 <213> Schizophyllum commune

<220>
 <221> misc_feature
 <223> (1-679) SC3 coding sequence

<220>
 <221> misc_feature
 <223> (1-92) 1st cDNA

<220>
 <221> misc_feature
 <223> (146-183) 2nd cDNA

<220>
 <221> misc_feature
 <223> (240-317) 3rd cDNA

<220>
 <221> misc_feature
 <223> (374-469) 4th cDNA

<220>

<221> misc_feature
<223> (524-586) 5th cDNA

<220>
<221> misc_feature
<223> (635-679) 6th cDNA

<400> 23
atgttcgccc gtctccccgt cgtgttcctc tacgccttcg tcgcgttcgg cgccctcgtc 60
gctgccctcc caggtggcca cccgggcacg acgtacgtcg acctctcacc gtcctctaata 120
gtcttgctga tgaagccccg tatagcacgc cgccgggttac gacgacgggtg acggtgacca 180
cgggtgagtag ctttctcgcc gtcgacgact cgaacgcatt ggctaatttt tgctcatagc 240
cgccctcgac gacgaccatc gccgccgggtg gcacgtgtac tacgggggtcg ctctcttgct 300
gcaaccaggt tcaatcggtg cgtacatcaa agcggcacga ccaggcatct cagctgacgg 360
ccacatcgta caggcgagca gcagccctgt taccgccctc ctgggcctgc tcggcattgt 420
cctcagcgac ctcaacgttc tcgttggcat cagctgctct cccctcactg tgagatcttt 480
ttgttcaactg tccaattac tgcgcactga cagactttgc caggtcacgc gtgtcggagg 540
cagcggctgt tcggcgacga ccgtctgctg cgaaaacacc caattcgat gtatactttc 600
catgcgtgtc cttttctccg ctaatcatct gtagaacggg ctgatcaaca tcggttgac 660
ccccatcaac atcctctga 679

<210> 24
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR 5' primer

<400> 24
actacacgga ggagctcgac gacttcgagc agcccagagct gcacgcaggg tggccacccg 60
ggc 63

<210> 25
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR 3' primer

<400> 25
tcgtacggat cctcagagga tggtgatggg 30

<210> 26
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR 5' primer

<400> 26
ggaattccgc ggactgcgca tcatgaagtt cttcgccatc gcc 43

<210> 27
<211> 80
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR 3' primer

<400> 27
tgaattccat atgttaggta ccaccggggc ccatgccggt agaagtagaa gccccgggag 60
caccgacggc ggtctggcac 80

<210> 28
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR 5' primer

<400> 28
tgaattcggg acccaggctt gctcaagcgt c 31

<210> 29
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR 3' primer

<400> 29
tgaattccat atgtcacagg cactgagagt agta 34

<210> 30
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR 5' primer

<400> 30
gaattcggta ccctcgtccc tcgcgggtccc gccgaagtga acctggtg 48

<210> 31
<211> 34
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR 3' primer

<400> 31

tgaattccat atgctaaccc cgtttcatct ccag

34

<210> 32

<211> 918

<212> DNA

<213> Trichoderma reesei

<220>

<221> terminator

<222> (1)..(918)

<223> T. reesei hfb1 terminator

<400> 32

gatgcccgcc cgggggtcaag gtgtgcccgt gagaaagccc acaaagtgtt gatgaggacc 60
atttccggta ctgggaaagt tggctccacg tgtttgggca ggtttgggca agttgtgtag 120
atattccatt cgtacgcat tcttattctc caatatttca gtacactttt cttcataaat 180
caaaaagact gctattctct ttgtgacatg ccggaaggga acaattgctc ttggtctctg 240
ttatttgcaa gtaggagtgg gagattcgcc ttagagaaag tagagaagct gtgcttgacc 300
gtggtgtgac tcgacgagga tggactgaga gtgttaggat taggtcgaac gttgaagtgt 360
atacaggatc gtctggcaac ccacggatcc tatgacttga tgcaatgggtg aagatgaatg 420
acagtgtaag aggaaaagga aatgtccgcc ttcagctgat atccacgcca atgatacagc 480
gatatacctc caatatctgt gggaacgaga catgacatat ttgtgggaac aacttcaaac 540
agcgagccaa gacctcaata tgcacatcca aagccaaaca ttggcaagac gagagacagt 600
cacattgtcg tcgaaagatg gcacgtacc caaatcatca gctctcatta tcgcctaaac 660
cacagattgt ttgccgtccc ccaactccaa aacgttacta caaaagacat gggcgaatgc 720
aaagacctga aagcaaaccc tttttgcgac tcaattccct cctttgtcct cggaatgatg 780
atccttcacc aagtaaaaga aaaagaagat tgagataata catgaaaagc acaacggaaa 840
cgaaagaacc aggaaaagaa taaatctatc acgcaccttg tccccacact aaaagcaaca 900
gggggggtaa aatgaaat 918

<210> 33

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR 5' primer

<400> 33

gacctcgatg cccgcccggg gtcaag

26

<210> 34

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR 3' primer

<400> 34

gtcgacattt cattttaccc ccctcg

26

<210> 35
 <211> 1190
 <212> DNA
 <213> Trichoderma reesei

<220>
 <221> promoter
 <222> (1)..(1190)
 <223> T. reesei hfb2 promoter

<400> 35
 ctcgagcagc tgaagcttgc atgcctgcat cctttgtgag cgactgcatc cattttgcac 60
 acactgccgt cgacgtctct ctcccgacct tggccagctg gacaagcaac acaccaatga 120
 cgctttgtat tattagagta tatgcaagtc tcaggactat cgactcaact ctacccaccg 180
 aggacgatcg cggcacgata cgccctcggt ctcatggcc caagcagacc aactgccct 240
 ggagcaagat tcagcccaag ggagatggac ggcagggcac gccaggcccc caccaccaag 300
 ccactccctt tggccaaatc agcttgcatt tcaagagaca tcgagctgtg ccttgaaatt 360
 actaacaacc agggatggga aacgaagcct gcttttgga agacaacaat gagagagaga 420
 gagagagggg gagagacaat gaggccaca aacctggtg tgctccgcca atgcgtctga 480
 aatgtcacat ccgagctctg gggcctctgt gagaatgtcc agagtaatac gtgttttgcg 540
 aatagtcctc tttcttgagg actggatacc tacgataccc tttttgagtt gatgcggtgc 600
 tttcgaagta ttatctggag gatagaagac gtctaggtaa ctacacaaaa ggcctatact 660
 ttggggagta gcccaacgaa aggttaactcc tacggcctct tagagccgtc atagatccta 720
 cagcctcttg gagccgtcat agatcacatc tgtgtagacc gacattctat gaataatcat 780
 ctcatcatgg ccacatacta ctacatacgt gtctctgcct acctgacatg tagcagtggc 840
 caagacacca agggcccagc atcaagcctc cctacctatc ctttccattg tacagcggca 900
 gagagattgc gatgagccct ctccctacct acagacggct gacaatgtcc gtataccacc 960
 agccaacgtg atgaaaacaa ggacatgagg aacagcctgc gagagctgga agatgaagag 1020
 ggccagaaaa aaaagtataa agaagacctc gattcccgcc atccaacaat cttttccatc 1080
 ctcatcagca cactcatcta caaccatcac cacattcact caactcctct ttctcaactc 1140
 tccaaacaca aacattcttt gttgaatacc aaccatcacc acctttcaag 1190

<210> 36
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR 5' primer

<400> 36
 aagcttgcac gcctgcatcc 20

<210> 37
 <211> 26
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR 3' primer

<400> 37
 ccatggtgaa aggtggtgat gggttg 26

<210> 38
<211> 13
<212> PRT
<213> Trichoderma reesei

<220>
<221> misc_feature
<223> vild type T. reesei EGI peptide linker

<400> 38
Val Pro Arg Gly Ser Ser Ser Gly Thr Ala Pro Gly Gly
1 5 10

<210> 39
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: modified CBHII linker

<400> 39
Gly Ser Ser Ser Gly Thr Ala Pro Gly Gly
1 5 10

<210> 40
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Met/Thrombin
linker

<400> 40
Pro Gly Arg Pro Val Leu Thr Gly Pro Gly Met Gly Thr Ser Thr Ser
1 5 10 15

Ala Gly Pro

<210> 41
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Met-containing linker

<400> 41

Pro Gly Ala Ser Thr Ser Thr Gly Met Gly Pro Gly Gly
1 5 10

<210> 42
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: linker containing the thrombin
cleavage site

<400> 42
Gly Thr Leu Val Pro Arg Gly Pro Ala Gly Val Asn Leu Val
1 5 10

<210> 43
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide
NheIBgIIINheI of the pTNS15 plasmid

<400> 43
gctagagatc tctagc

16

<210> 44
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic peptide AocIXbaIAocI of
the pTNS15 plasmid

<400> 44

Ala Ser Gly Ala Ser Arg Ala Ser Gly
1 5

<210> 45
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic oligonucleotide
AocIXbaIAocI of the pTNS15 plasmid

<400> 45

gcctcaggag cctctagagc ttcagga

27

<210> 46

<211> 20

<212> PRT

<213> Trichoderma reesei

<400> 46

Ala	Asn	Ala	Phè	Cys	Pro	Glu	Gly	Leu	Leu	Tyr	Thr	Asn	Pro	Leu	Cys
1				5					10					15	

Cys	Asp	Leu	Leu
			20